



HP DraftPro Plus Plotter



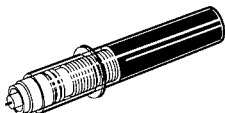
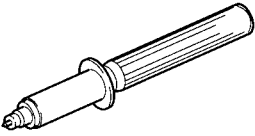
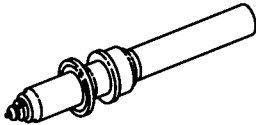


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가 - fiber-tip (fiber-tip for paper), fiber-
 tip (fiber-tip for transparency film), (disposable drafting pen), 가
 (refillable drafting pen) - (plotter paper), vellum ,
 (translucent media), matte (double-matte polyester film),
 (transparency film) 가 ,
 fiber-tip
 ,
 .

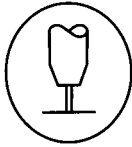
Pen type	Pen	Recommended media
Fiber-tip pens for paper		<p>Plotter Paper: Good quality for drawings with solid area fill.</p> <p>Glossy Paper: Excellent line quality.</p>
Fiber-tip pens for transparency film		<p>Transparency Film: Excellent for overlays or overhead projection.</p> <p>Glossy Paper: Excellent line quality.</p>
Disposable drafting pens for paper and vellum		<p>Plotter Paper: Excellent for preliminary drawings.</p> <p>Vellum: Excellent quality for final drawings. Use for diazo reproductions at fast developing speed.</p>
Disposable drafting pens for polyester film		<p>Polyester Film: Excellent quality for high accuracy and for final, archive drawings.</p>
Refillable drafting pens		<p>Vellum and translucent media: Excellent quality for final drawings. Use for diazo reproductions at fast developing speed.</p> <p>Polyester Film: Excellent quality for high accuracy and for final, archive drawings.</p>

(Carousel)

가 Carousel . – fiber-tip
drafting 가 .



fiber-tip

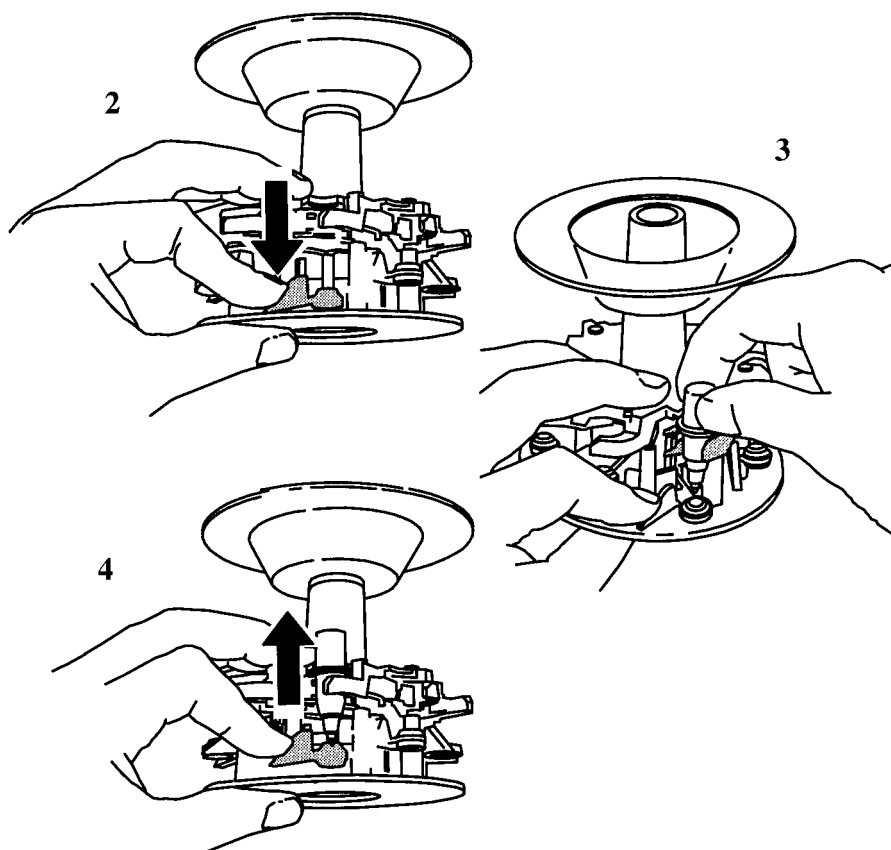


drafting

1 8 .

fiber-tip . Drafting .

- 1. .
 - 2. 가 가 가
 - 3. 가
 - 4. 가
- 2 4 .

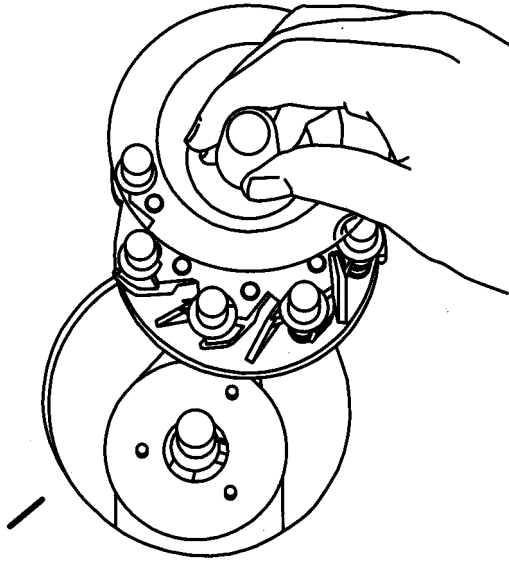


1.

2.

가

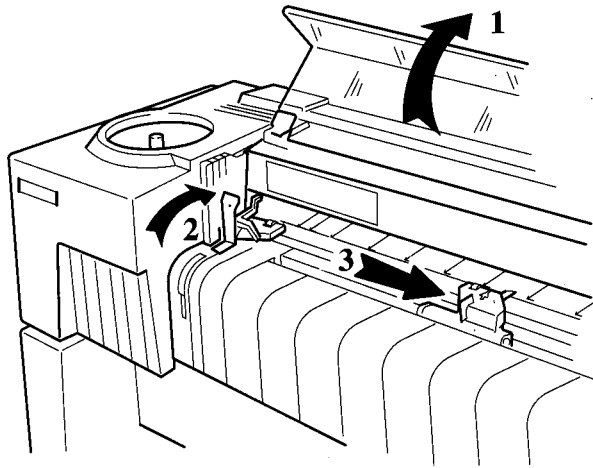
1



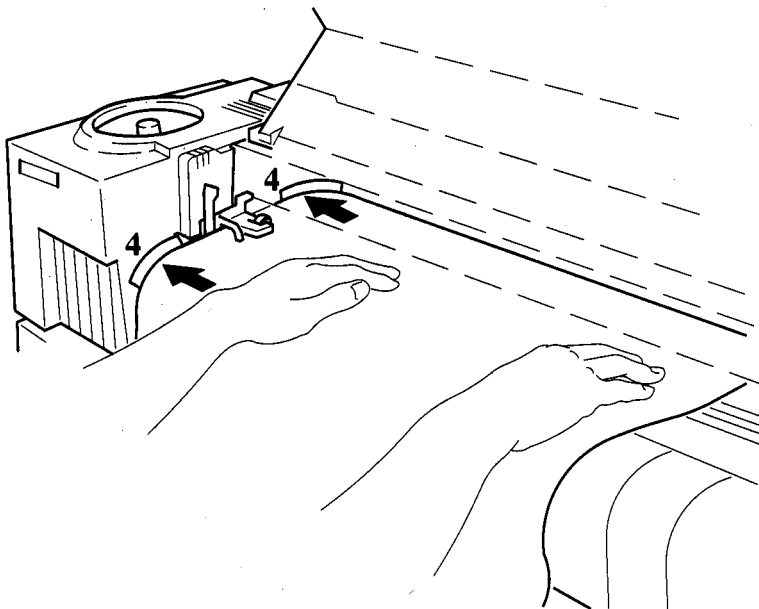
가

가

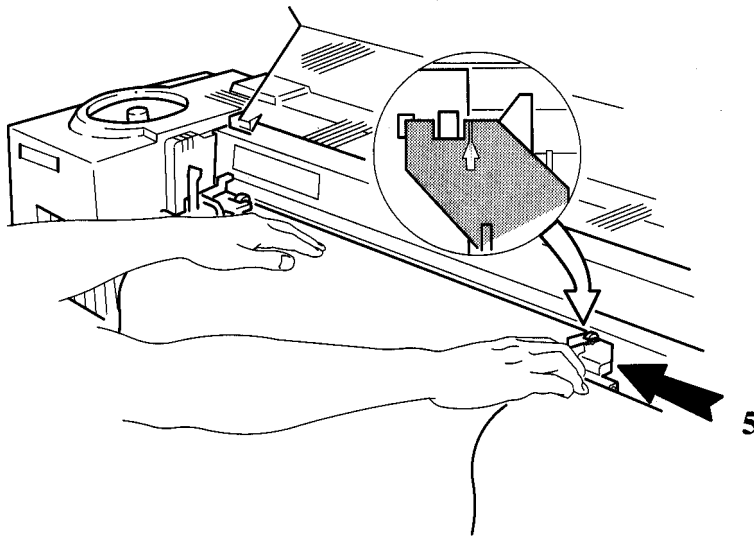
1. carriage cover
2. pinch wheel
3. pinch wheel



4. 가 pinch wheel 가 가 ,

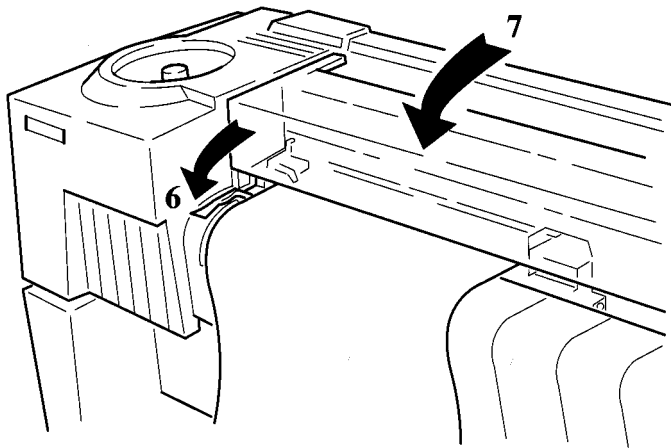


5. pinch wheel . pinch wheel 가

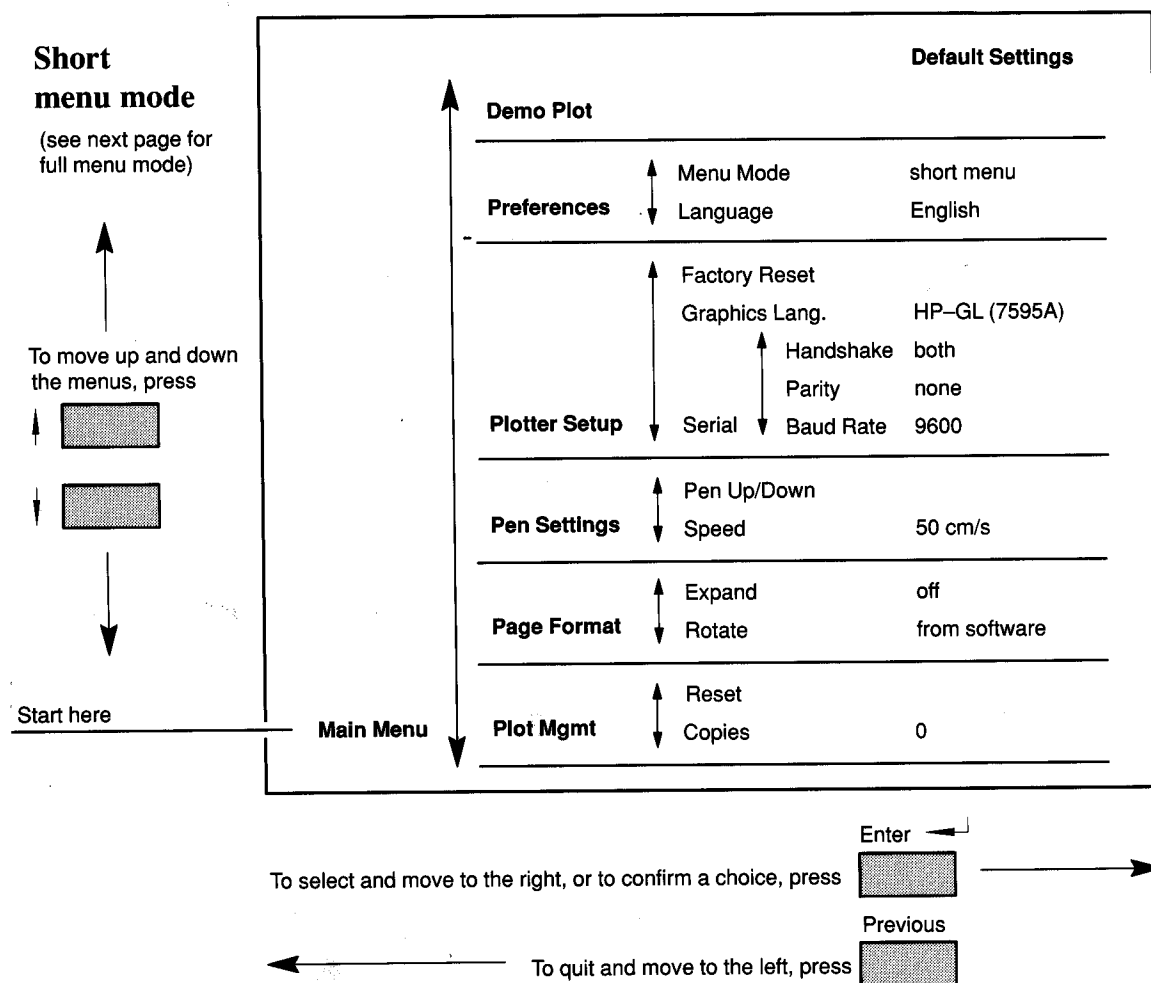


6. pinch wheel
7. Carriage cover 가

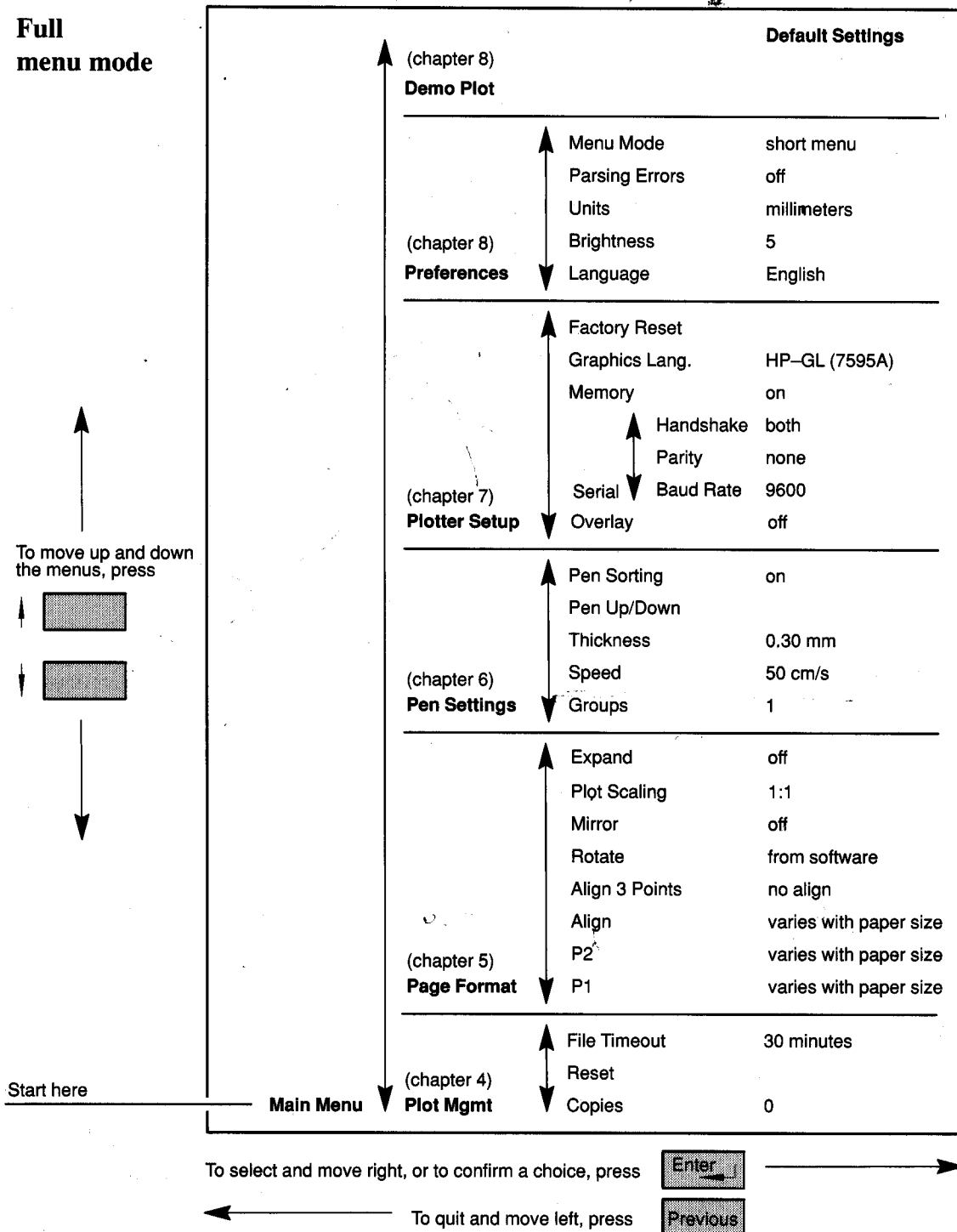
cover . cover 가



Short menu mode Full menu mode map



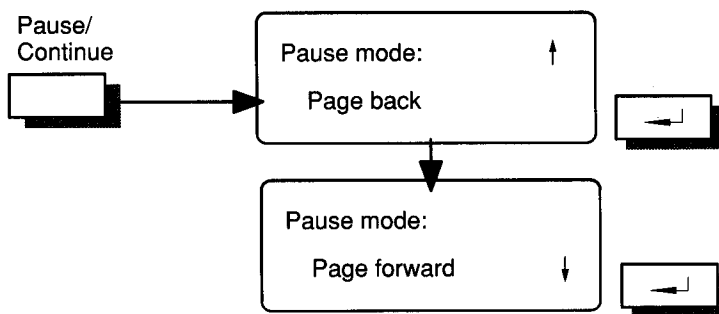
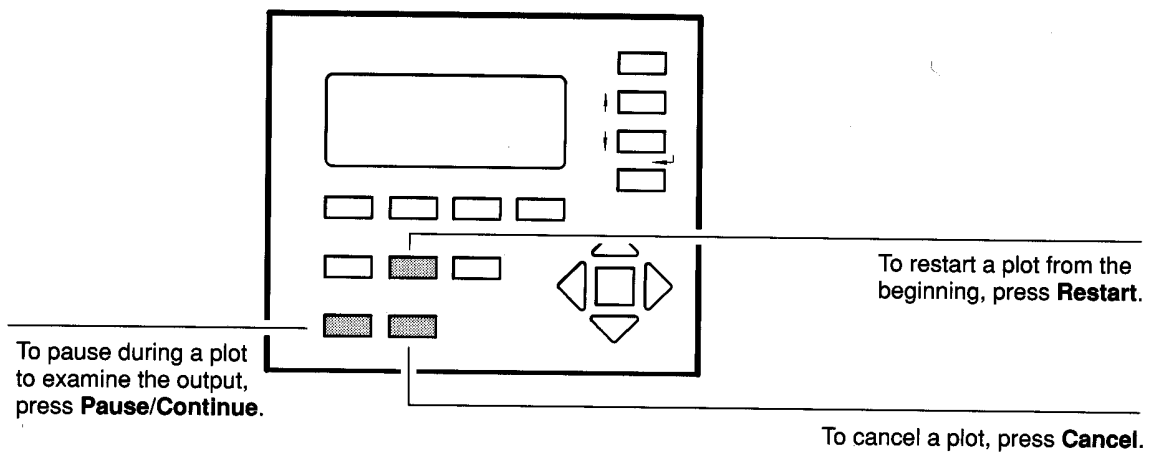
Full menu mode



가

“Status:ready” “Status:busy” .

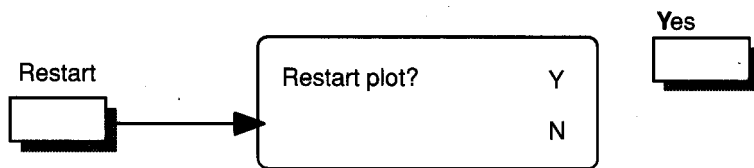
Enter 가 . Previous, Enter, ?, ? 가



가

가

가 . 가 Pause/Continue .
Pause/Continue .



가

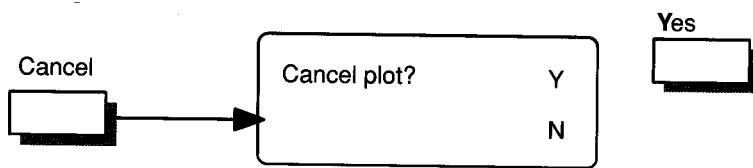
Overlay 가 off ()

1. “Load paper to plot” 가 가 가
2. Pause/Continue

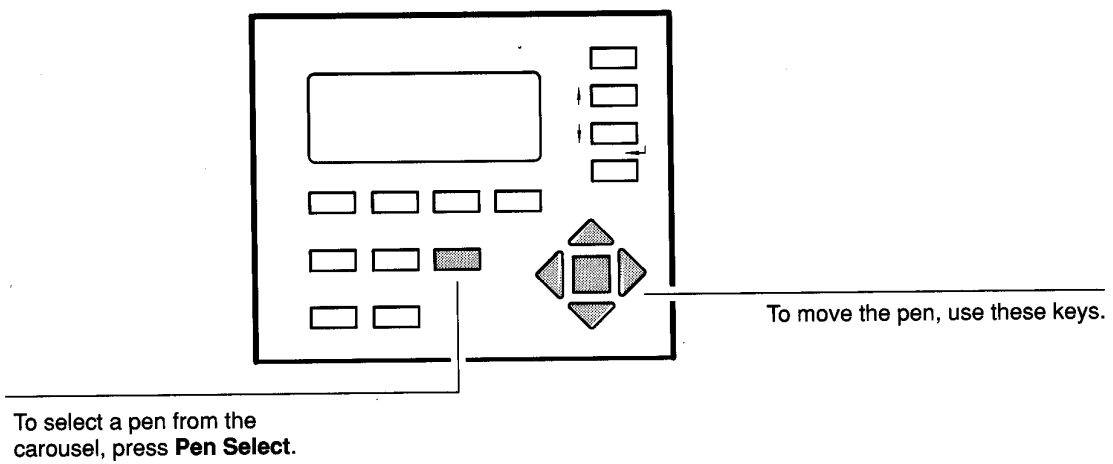
Overlay 가 on

“No plot available”

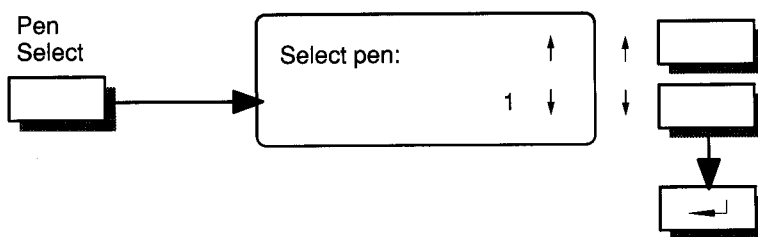
- 1.
2. Cancel:



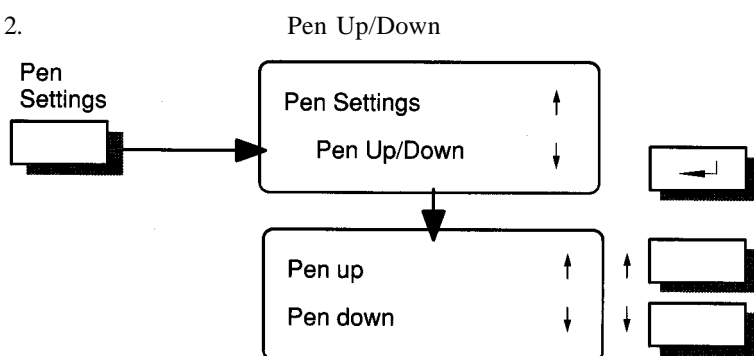
가



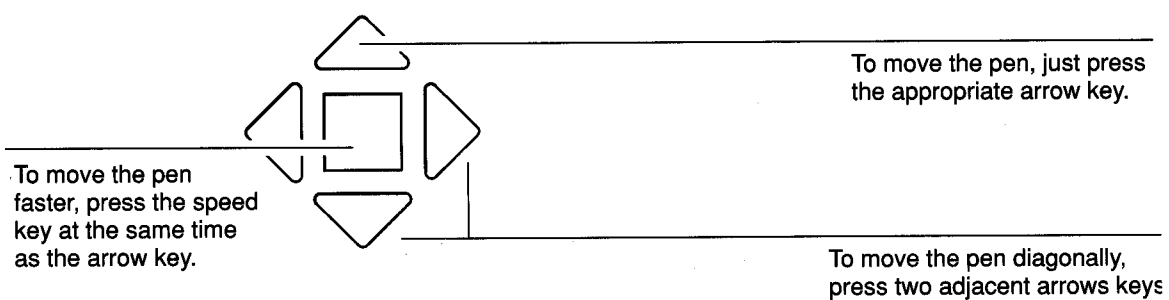
1.



2.



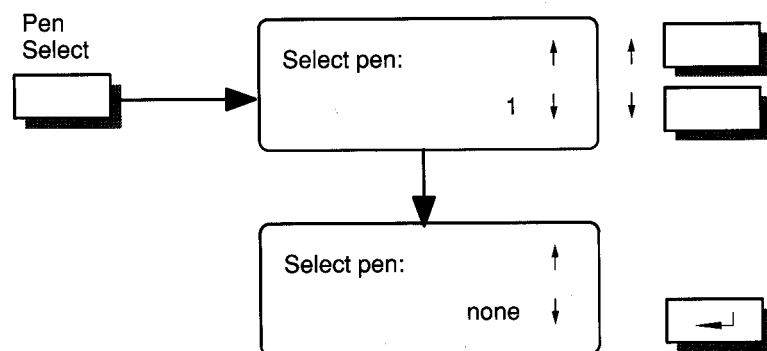
3.



4.

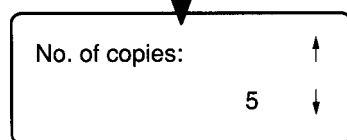
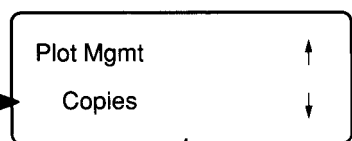
“none”

가



copies

Plot
Mgmt



가

99

가

가

Copying x of y

가

y

가

가

가

가 .(

0

.)

가 1MB

가

Reset

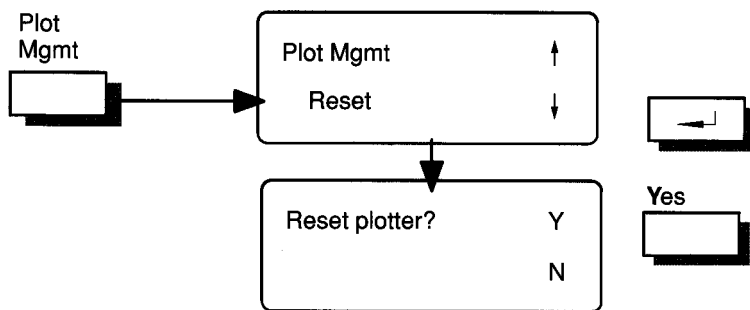
가

Plot Management

Page Format

Pen Setting

Drawing Quality



Queue 가

가

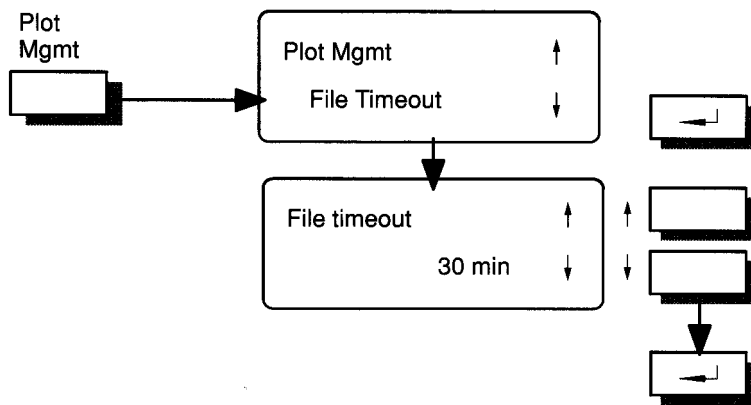
가 Pause

Reset

가

“ (Plotter separator)”
가

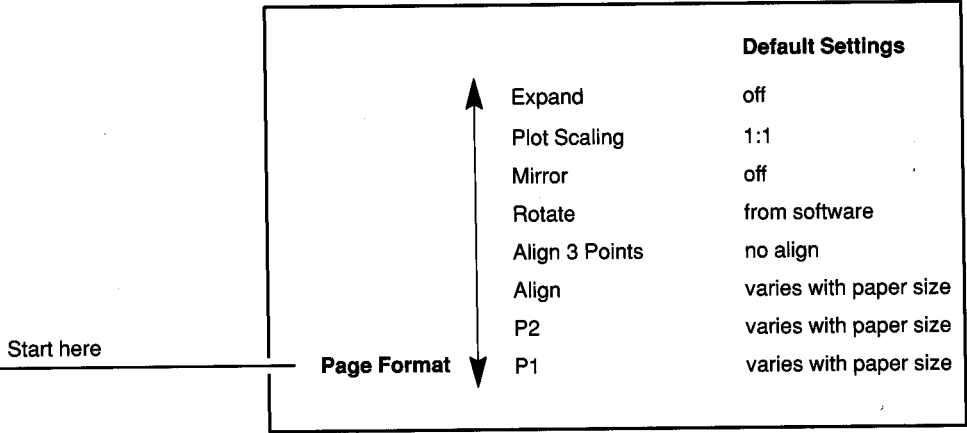
가
File Timeout



가 .

Copies, Expand, Graphics Language, Restart, Plot Scaling, Rotate, Mirror

Page format



P1, P2, Align Align 3 Points

가

X Y

Y X

P1, P2 Align

가

P1 P2 P1

P2

P1 P1 P2 가

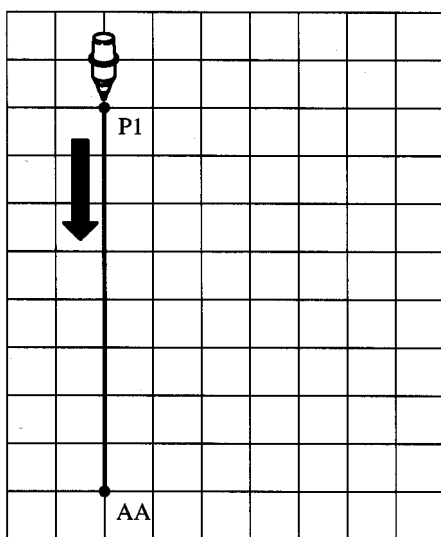
P2 가 P1 P2

P1

가

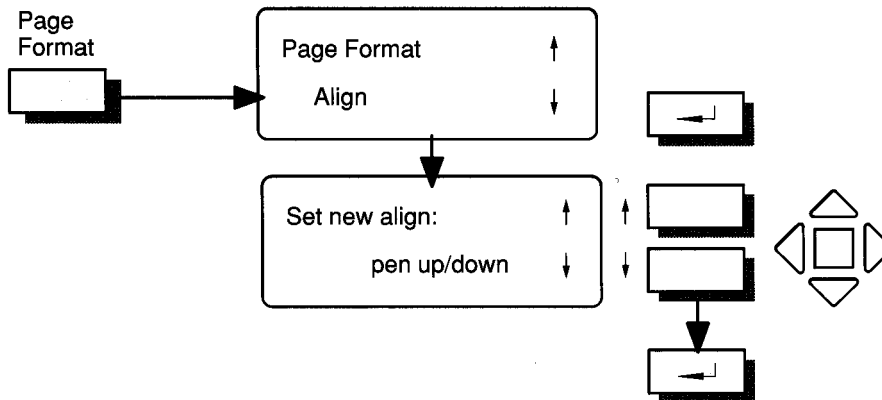
P1 P2 가 3 AA

point (axis align point)



Align
digitizing sight

- 1.
2. digitizing sight . Pen Select digitizing sight
3. P1 P1
4. Page format Align . digitizing sight
5. sight . Up / down sight



6. Enter
 7. P2 P2
- 6 . 6 가 sight P1

Align 3 Points

가 , 가 .

Page Format Align 3 Points 가 .

가 (

가)

가 가 .

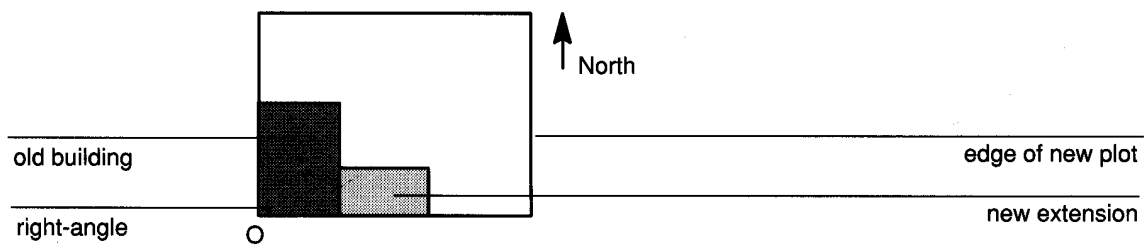
A.

B.

C.

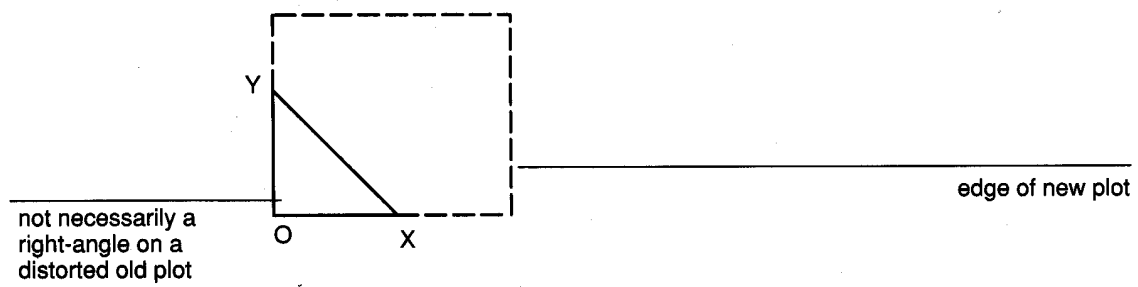
A.

O

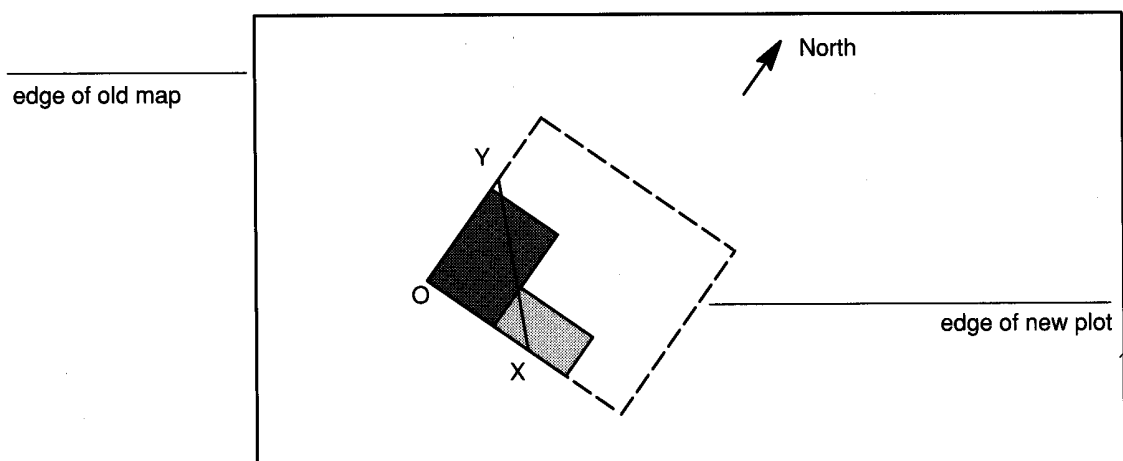


You must be able to identify point O on the old plot.

/	O		
/		X	X
/		Y	Y



OX OY 가
3



B. 3

1. digitizing sight digitizing sight
2. Preference/Units OX OY (mm inch)
- 3.
4. digitizing sight
5. Page Format / Align 3 Points
6. digitizing sight O

digitizing sight . digitizing sight ,

7. sight 가 , Enter .

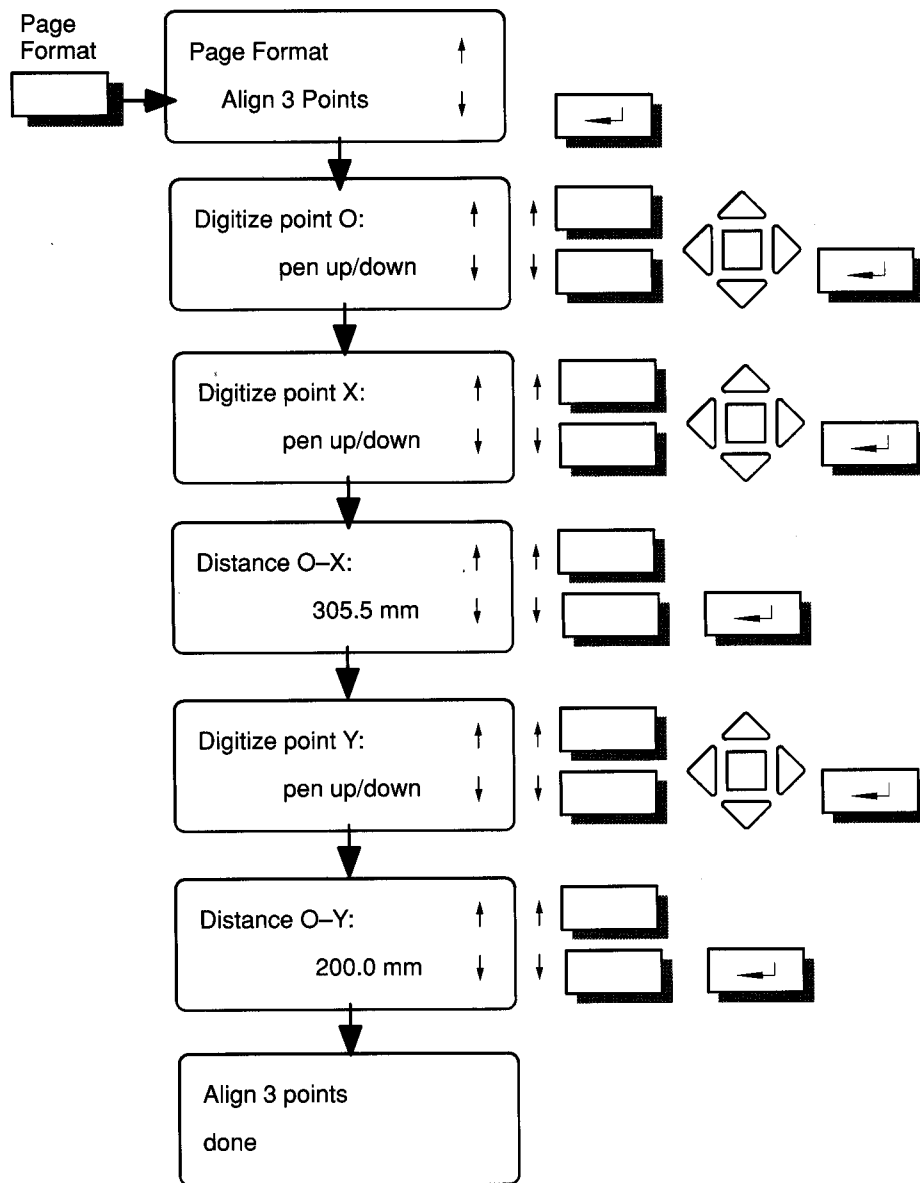
8. digitizing sight X Enter .

O X . 가 Enter

9. Y 7 . Enter .

10. digitizing sight .

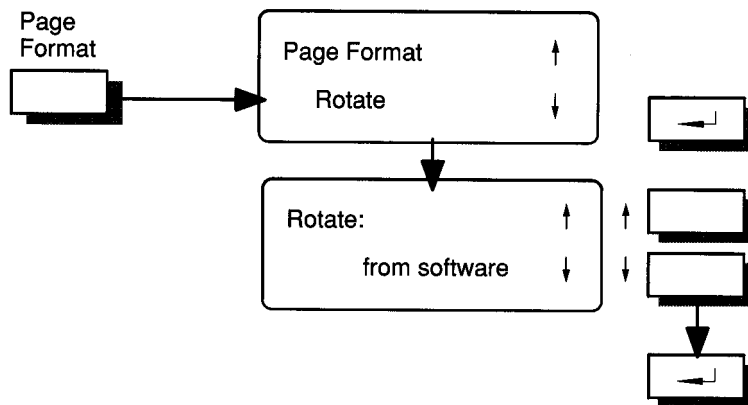
5 9 .



C.

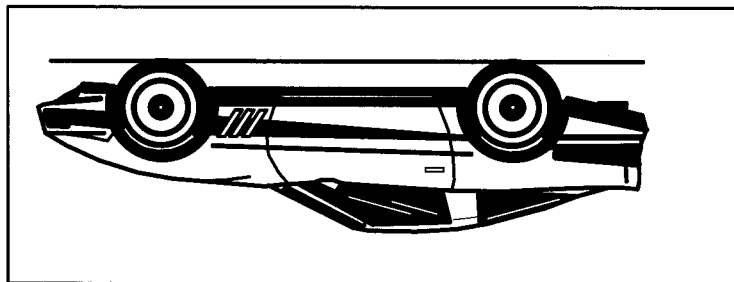
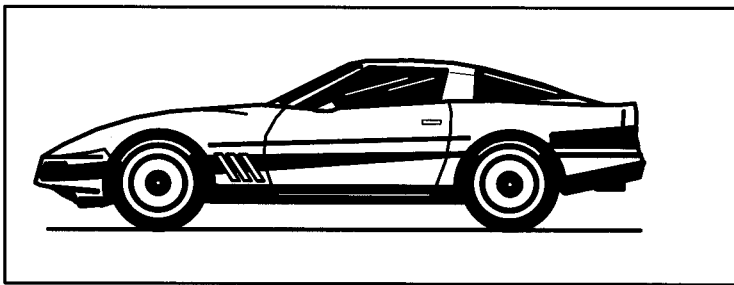
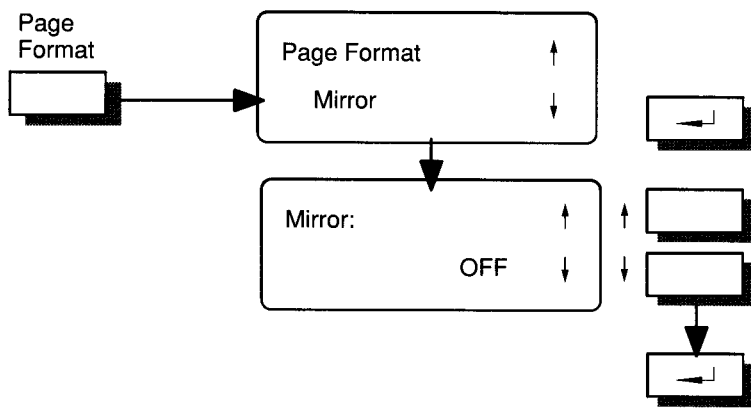
- 1.
- 2.

, X , Rotate
X

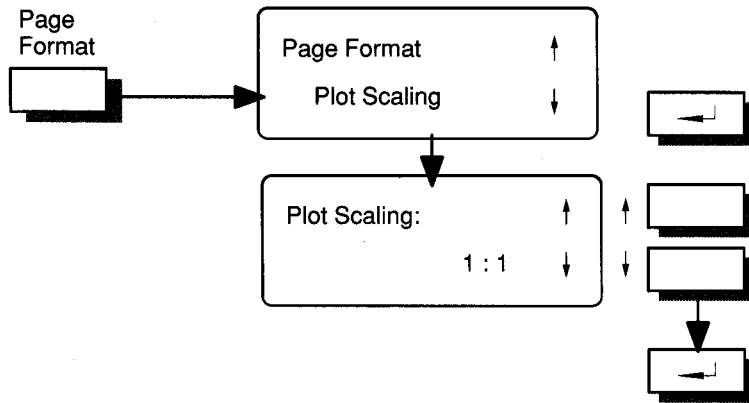


From Software:

0, 90, 180, 270:

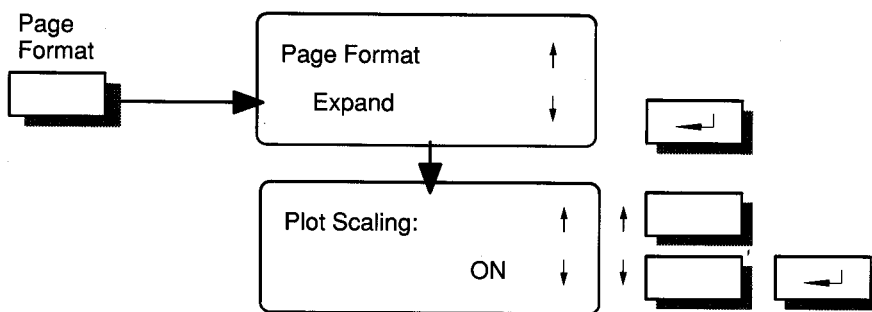


Plot Scaling



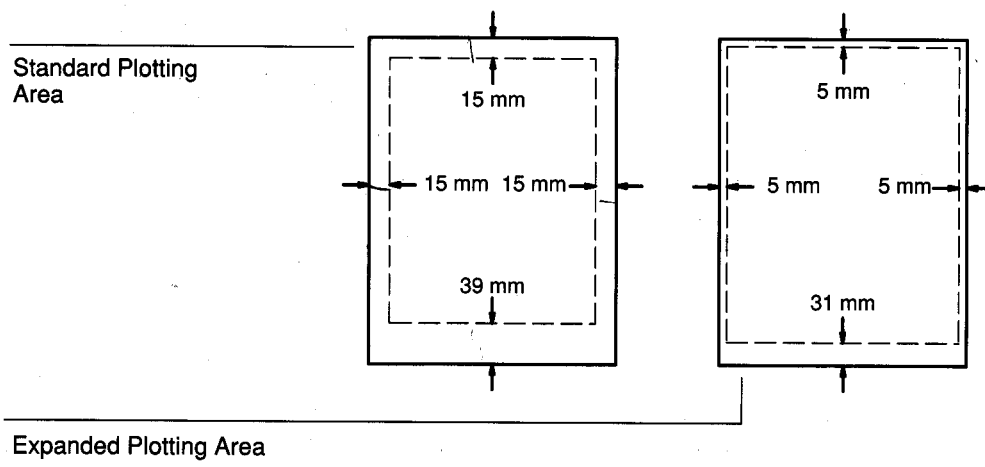
Expand
가

가 가



Standard

Expand

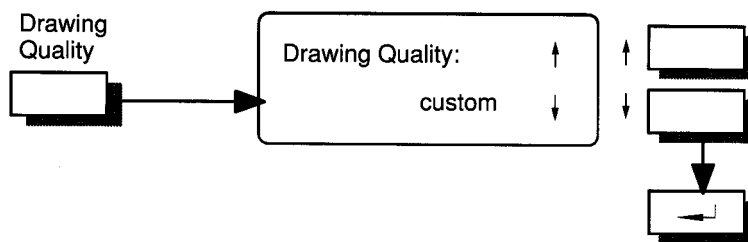


Drawing Quality
Pen Setting

Drawing Quality

draft()

final()



Custom:

, Pen settings / Speed

50 cm/s

Quality:

30 cm/s

. (,)

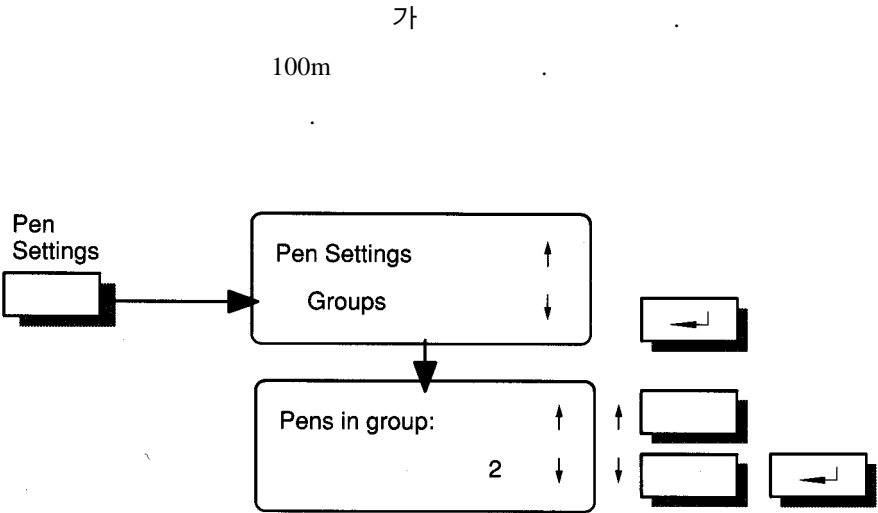
Draft:

110 cm/s

. (,)

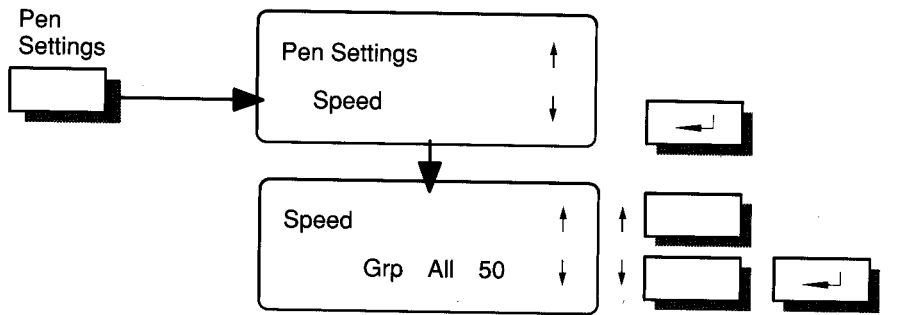
(drafting pen)

Groups



Pens in Group	Description	Load the carousel as follows
1	8 groups of 1 pen each (default; normal plotting)	as usual; each pen is its own group
2	4 groups of 2 pens each	pens 1 and 2 = 1st color/thickness pens 3 and 4 = 2nd color/thickness pens 5 and 6 = 3rd color/thickness pens 7 and 8 = 4th color/thickness
4	2 groups of 4 pens each	pens 1 through 4 = 1st color/thickness pens 5 through 8 = 2nd color/thickness
8	1 group of 8 pens	use one color/thickness for all 8 pens

Speed



가

가 “All”

“...”

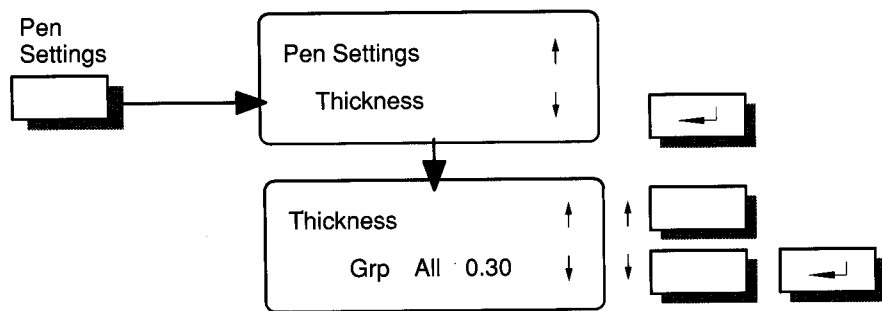
cm/s

10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 70, 80, 90, 100, 110

Thickness

가

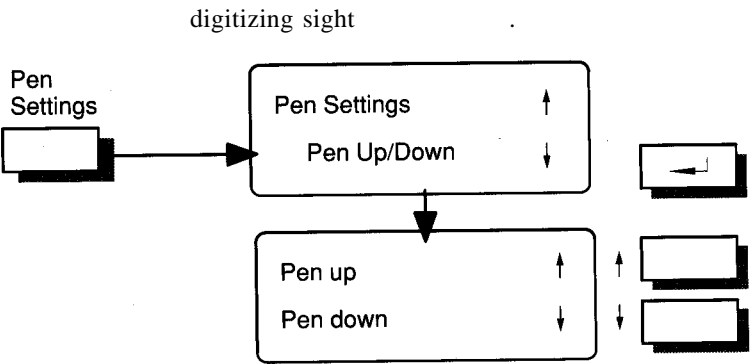
가



mm

0.18, 0.25, 0.30, 0.35, 0.50, 0.60, 0.70, 1.00

Thickness



4

가

Pen Sorting

가

가

Pen Sorting On

Pen Sorting Off

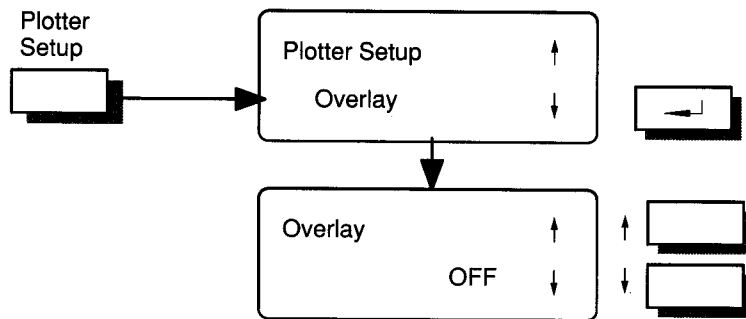
() Pen

Sorting Off

(Configuring your plotter) —

Overlay

가 가



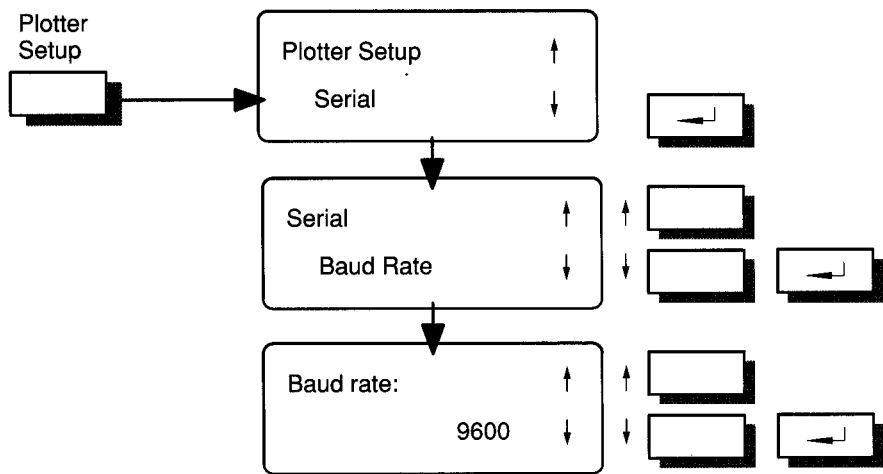
Overlay 가 On

가

Parameter	Default setting on your plotter
Baud rate	9600
Parity	none
Handshake	both (hardwire and Xon/Xoff)

Baud rate

가 가

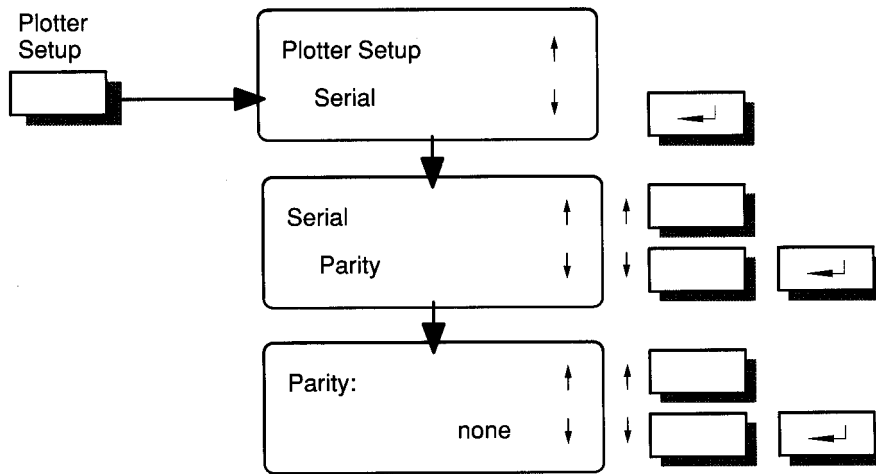


baud rate

300, 600, 1200, 2400, 4800, 9600, 19200

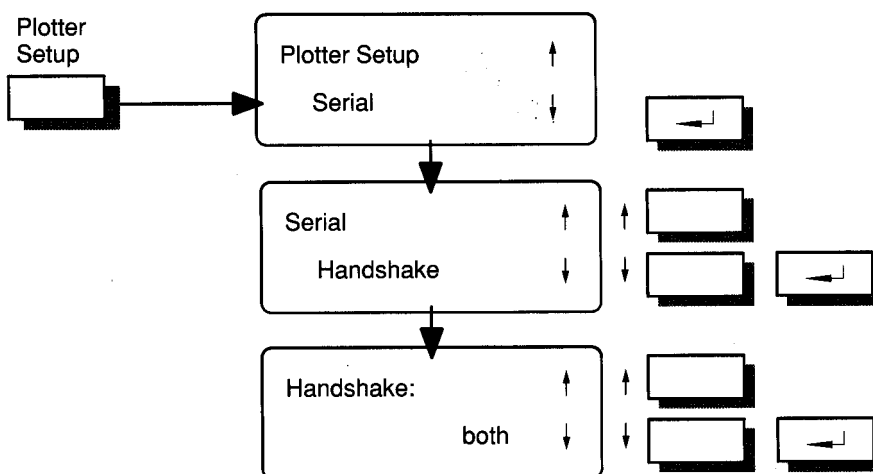
Parity

가 가



Handshake

hadshake	Hardwire
Xon.Xoff	Xon/Xoff
Handshke	both (default)



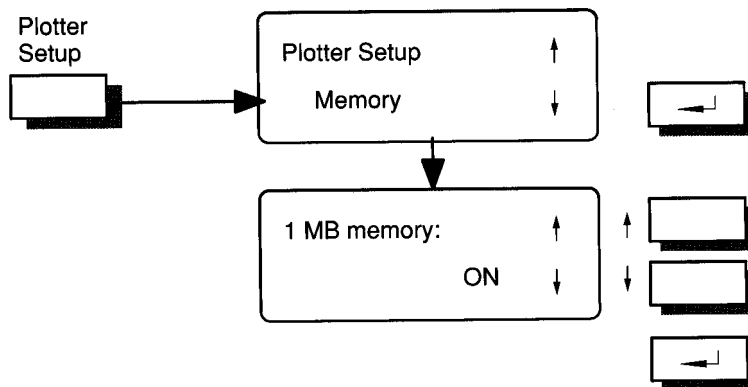
hardwire Xon/Xoff

가
가

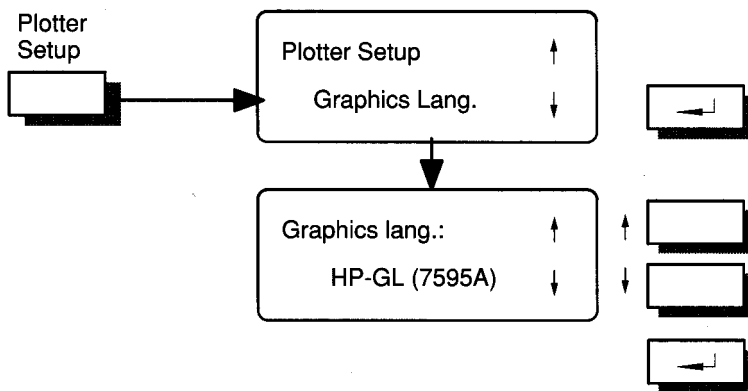
가

off

가



If your software is set to ...	Graphics language mode should be ...
HP DraftPro Plus, or HP DraftMasters other than those below, or Hewlett-Packard HP-GL/2 device, or similar option indicating HP-GL/2 support	HP-GL/2
HP DraftMaster 7595A or 7596A	HP-GL (7595A)
HP 7585B or 7586B	HP-GL (7585B)



The following three pages explain the technical background to the graphics language settings.

“ (Graphics language)” 가 (CAD)

가

가 DraftPro Plus

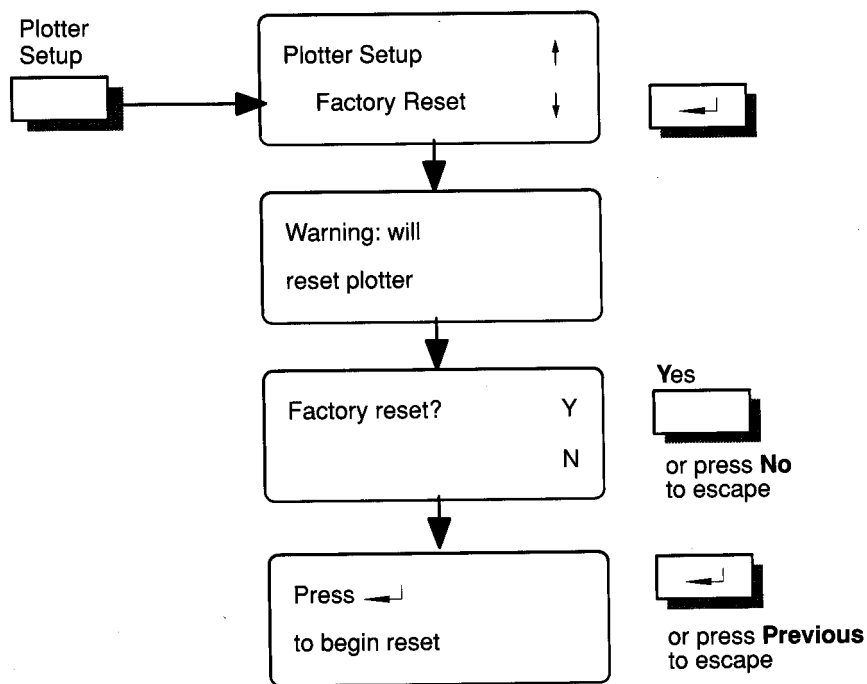
HP-GL/2 HP-GL HP 7570A, 7575A, 7576A

HP-GL

Factory Reset

Queue

- 1.
- 2.



- 3.

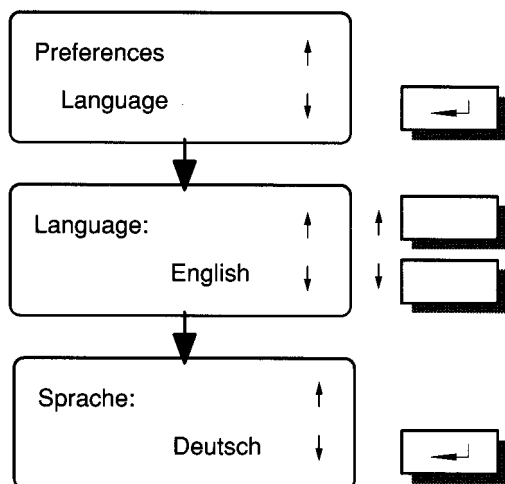
가 Pause

Factory Reset

가

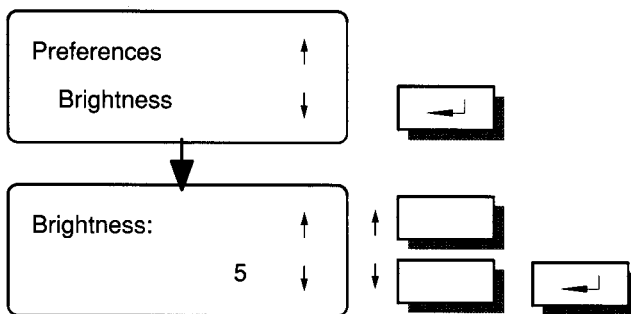
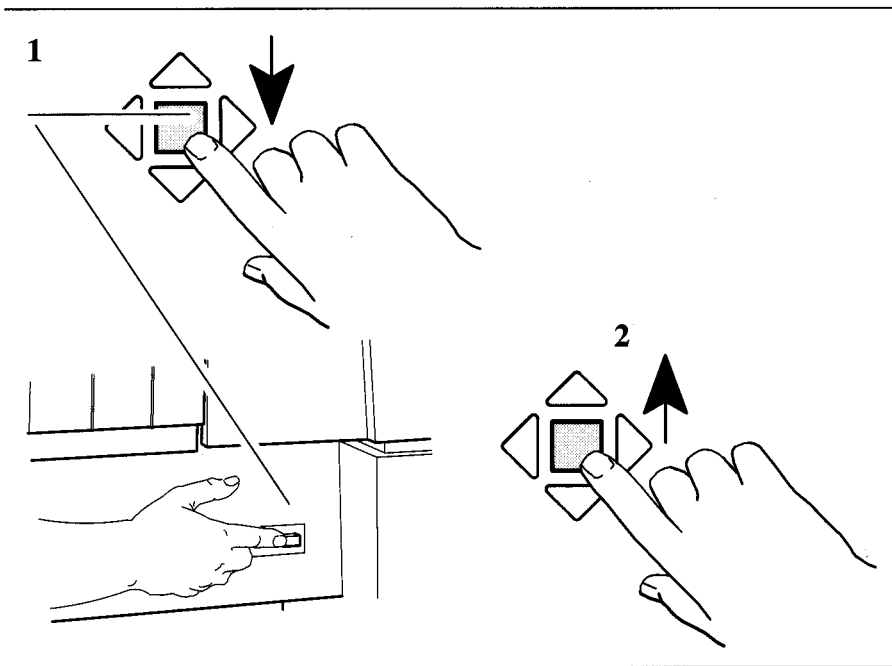


Preferences/Language



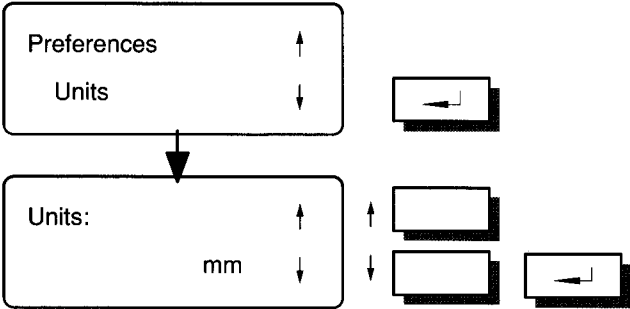
Cursor Control Speed

1. 가 Speed key
2. "Status: initializing" 가 Speed key "Status: initializing"
가
3. Enter



1 10 가

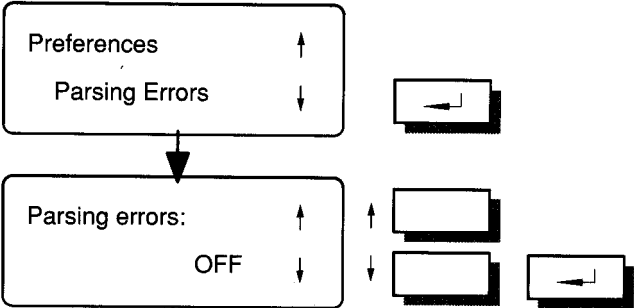
page format/Align 3 points



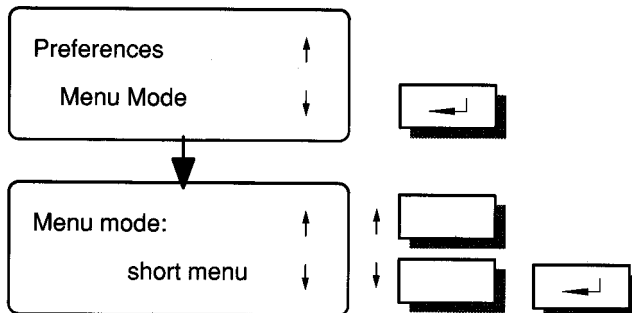
mm / inch 가

Parsing Error

Parsing error datastream error
Syntax error



Full menu . Short Menu

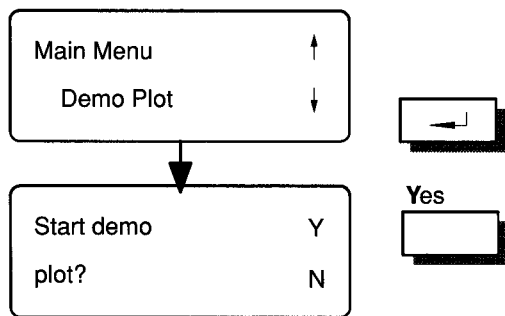


1. 1,2,3

Stall	If colored pens	If black pens with varying thicknesses
1.	black	0.70 mm
2	green	0.25 mm
3	blue	0.35 mm

2.

3. Demo Plot



가 Pause

Demo Plot

(Digitizing) X,Y 가

1. digitizing digitizing menu
2. digitizing sight digitizing sight
3. digitizing sight digitizing sight
4. digitizing sight 가 가 digitizing sight

digitize

Cofig.failure : see manual

가 . xx yy

가 Pause . Pause/Continue

Load carousel, press ?

Load paper to copy

Copies

가

Load paper to plot

가

가

No plot available

Sys. Failure : see manual

가

가

Too many pens

8

가

X- or Y-axis failure

. Platen

가

Platen

가

가

a/s

X-O-Y angle bad, digitize again

Align 3 Points



가 , 가 , X Y-axis failure 가 .

~~1~~ .

~~2~~ , .

~~3~~ 가 .

~~4~~ pinch wheel .

~~5~~ pinch wheel .

~~6~~ .

가
carriage cover ,
 . ,

가 . ,

가 .

가

Pen Sorting 가

가

2

. (end-of-file

)

가 .

- HP-GL software: RP;
- HP-GL/2 software: RP; or PG;

File Timeout

가

가 .

5

가 HP-GL

HP-GL/2

가

가

Cancel

Carriage cover

lever

Cover

Reference

Plotter, pen, and media specifications

Physical Specifications

C3170A (A1/D-size)	Size	depth: 686 mm (27 in) width: 1161 mm (46 in) height: 1240 mm (49 in)
	Weight	47 kg (104 lbs)
C3171A (A0/E-size)	Size	depth: 686 mm (27 in) width: 1445 mm (57 in.) height: 1240 mm (49 in)
	Weight	53 kg (117 lbs)

Power Specifications

Source	100 through 240 V \pm 10%, wide range
Frequency	50 through 60 Hz \pm 10%
Consumption	95 W maximum
Current	1.9 A maximum

Environmental Specifications

Operating Temperature	0 degrees C to 55 degrees C
Operating Humidity*	8 to 80% relative humidity at 0 to 40 degrees C (Media must be adapted to the plotting environment, according to the instructions given in chapter 1.)
Non-operating Temperature	–40 degrees C to 70 degrees C

Plotter Accuracy

Accuracy	0.2% of the move length or 0.5 mm (0.02 in.), whichever is greater (traceable to the National Bureau of Standards) (Using 3-mil double-matte polyester film at 10 to 30 degrees C.)
Repeatability	for the same pen: 0.1 mm (0.004 in.) from pen to pen: 0.2 mm (0.008 in.) (This is a measure of how closely a device can return a pen to the previously plotted point.)
Addressable Resolution	0.025 mm (0.001 in.). (This means the smallest move the plotter can make programmatically.)
Mechanical Resolution	0.013 mm (0.0005 in.)

Pen Specifications

Number of Pens	8
Pen Types	fiber-tip paper pens drafting pens transparency pens
Resolution	addressable step size: 0.025 mm (0.001 in)
Pen Speed	maximum 110 cm/sec (43 ips)
Acceleration	maximum 3.0 g

Media Specifications

Types	plotter paper vellum double-matte polyester film	
Margins*	Normal: 3 margins 15 mm (0.59 in), 1 margin 39 mm (1.5 in) With Expand on: 3 margins 5 mm (0.2 in), 1 margin 31 mm (1.2 in) *Margins are approximate; exact values may vary slightly.	
Sizes	A1/D-size plotter	A0/E-size plotter
Maximum width	635 mm (25.02 in)	918 mm (36.17 in)
Minimum width	207 mm (8.16 in)	207 mm (8.16 in)
Maximum length	1600 mm (63 in)	1600 mm (63 in)
Minimum length	215 mm (8.47 in)	215 mm (8.47 in)

Reference

RS-232-C Interface

Interface specifications

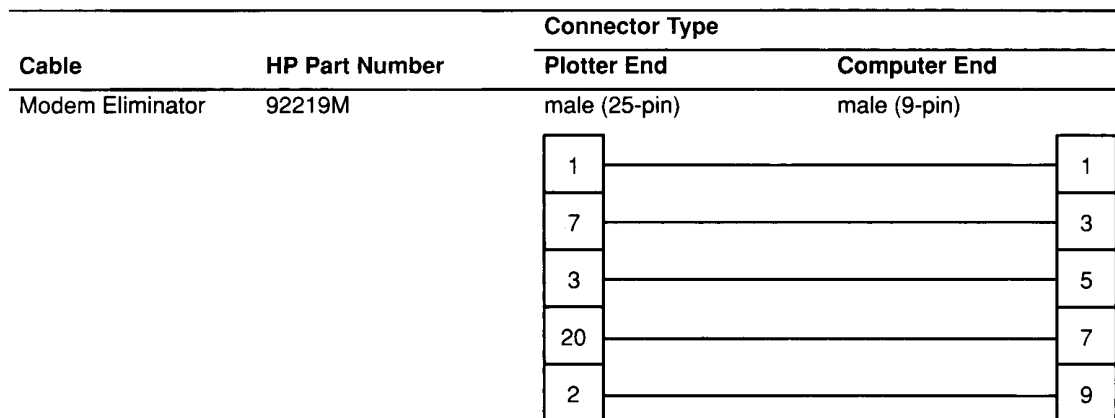
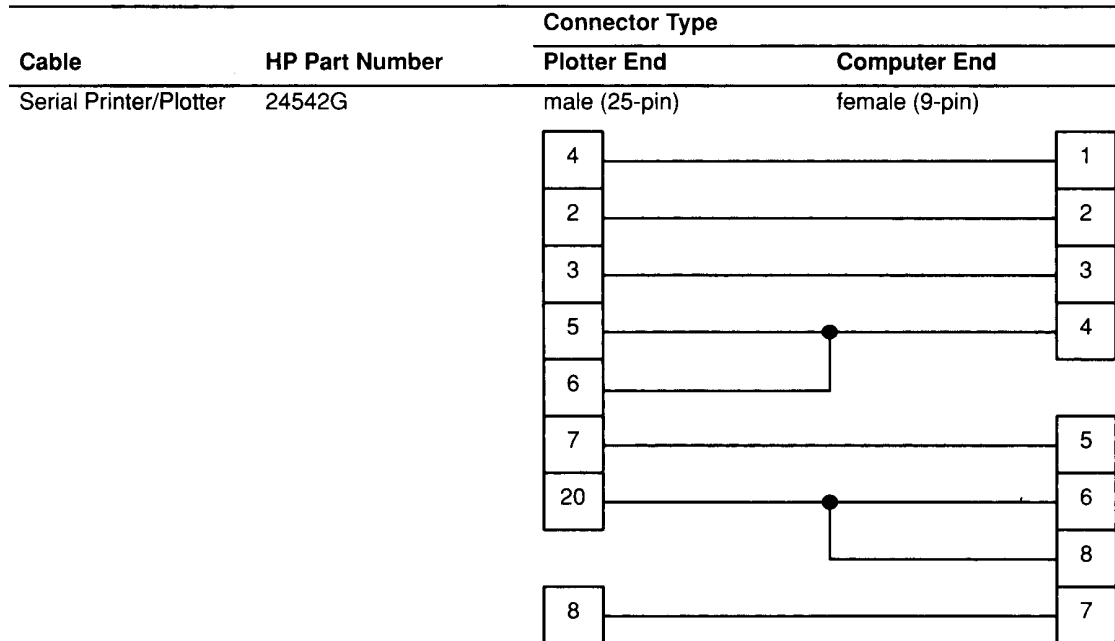
Serial (RS-232-C) interface

The plotter is configured as a DTE (data terminal equipment). Data is transmitted on pin 2 and received on pin 3. The connector on the plotter is 25-pin female.

Pin	Wire/Signal Name	RS-232-C	CCITT V.24	Source
1	Protective Ground	AA	101	
2	Transmitted Data	BA	103	DTE
3	Received Data	BB	104	DCE
4	Request to Send	CA	105	DTE
5	Clear to Send	CB	106	DCE
6	Data Set Ready	CC	107	DCE
7	Signal Ground	AB	102	
20	Data Terminal Ready	CD	108.2	DTE

Over the page are the pin configurations for some of the more common HP cables referenced in the Setup Guide, under the section “Connecting the plotter to your computer”.

Reference
RS-232-C Interface



Reference
RS-232-C Interface

Cable	HP Part Number	Connector Type (25-pin)	
		Plotter End	Computer End
Modem Eliminator	17255D 17255M OR 13242G*	male male	female male
* Symmetrical; either end may be connected to the plotter. Other pins are connected in the 13242G but do not affect plotter operation.			